MAGISTRATES COURT of TASMANIA

CORONIAL DIVISION

Record of Investigation into Death (Without Inquest)

Coroners Act 1995
Coroners Rules 2006
Rule 11

I, Simon Cooper, Coroner, having investigated the death of Dylan Broderick Ernest Young

Find, pursuant to Section 28 (1) of the *Coroners Act* 1995, as follows

a) The identity of the deceased is Dylan Broderick Ernest Young;

b) Mr Young's death occurred as a result of injuries sustained whilst felling trees in bushland at Back Cam Road, Somerset.

c) The cause of Mr Young's death was a traumatic brain injury; and

d) Mr Young died on 3 March 2016 near Somerset in Tasmania.

Dylan Broderick Ernest Young was at the time of his death single and living at his home with his mother. Although unemployed he was an active volunteer member of the Burnie branch of the State Emergency Service and well regarded within that unit. He was just 23 years of age at the time of his death.

Mr Young had a medical history of pancreatitis and type I diabetes, the latter of which was controlled with daily insulin injections.

On 1 and 2 March 2016 Mr Young cut wood with a friend, Mr Robert Williams, on a property owned by Mr Williams' mother at 379 Back Cam Road, Somerset. Both men returned to the property on 3 March 2016 to continue felling trees and cutting them up for firewood. They had identified a particular tree to fall the day before. The tree was located approximately 50m in from the edge of the bush on a steep slope.

Mr Young entered the bush carrying his chainsaw, an axe and some wedges. He was wearing face, ear and head protection, and also wearing chaps (cut resistant over-trousers for the use of chainsaws). Mr Williams stayed some distance away at the edge of the bush where the men's vehicles were parked and began cutting up some smaller trees that they had felled the day before.

Mr Young felled the tree he had identified the previous day. Physical evidence later located at the scene satisfies me that the tree fell forward from the tree stump. At the same time Mr Young moved to his right 3m away from the stump and the falling tree. The tree hit the ground with significant force (it was a very large tree) and that force caused part of a tree

located behind Mr Young to break away and fall. Mr Young was standing directly under the path of the falling tree. It struck him in the head and killed him almost instantly.

Mr Williams did not see the first tree fall or the part of the tree that hit Mr Young. He made his way toward where Mr Young had been working and could hear his chainsaw idling. Mr Williams called out to his friend but received no reply. He climbed the bank and found Mr Young lying on the ground next to a fallen tree. Mr Young's helmet was not on his head and the back part of his head was under the tree. Mr Williams phoned 000, pulled Mr Young out from under the tree and began CPR which he continued until the arrival of emergency services. His efforts in this regard are commendable.

It was apparent to attending members of the emergency services that there was nothing that could be done for Mr Young and so paramedics ceased attempts at resuscitation. The scene was secured and an investigation pursuant to the *Coroners Act* 1995 commenced immediately. The scene was carefully examined and a forensic officer photographed Mr Young's body and the scene. A number of exhibits were seized.

After formal identification Mr Young's body was removed by mortuary ambulance and transported to the mortuary at the Launceston General Hospital. At the hospital an autopsy was carried out by Dr Ruchira Fernando, pathologist. Dr Fernando expressed the opinion that the cause of Mr Young's death was traumatic brain injury. I accept this opinion. I note that Dr Fernando also identified that Mr Young was suffering from chronic pancreatitis. Although unrelated to his death, it is recommended that members of Mr Young's immediate family consult with their doctor to arrange for screening for this condition in light of the possibility that it is hereditary.

Police investigating Mr Young's death arranged for Mr Keith Eastley, a Forest Auditor and forest industry teacher and assessor with TasTAFE, to provide evidence. Aside from being very experienced in the area of tree felling, Mr Eastley was the teacher and assessor on a 3-day tree felling course at TasTAFE, Burnie in March 2015 on which Mr Young was a student. Mr Eastley provided an affidavit as part of the investigation. His evidence dealt with two discrete, but related, issues. First, he explained that Mr Young was deemed not competent to fall trees and was failed on the course (not even reaching a level of competence suitable to be assessed) because of serious safety breaches. He was told this and it was explained to him that under no circumstances should he fall trees without supervision or direct instruction from a qualified tree-feller.

Second, Mr Eastley attended the scene of Mr Young's fatal accident. He said in his affidavit:

> *"Immediately I noticed that the location in which [Mr Young] had been felling trees was an extremely hazardous area with a number of hazardous trees in the immediate area.*
>
> *I examined the tree stump of the tree [Mr Young] had fallen and could tell straight away that he had not cut it to an acceptable industry standard. Although the tree apparently fell in a safe area it was evident from the stump that it did not fall in the direction it should have.*

> *There were no clear escape routes from the stump; the requirement is that there are at least two routes away from the tree which is [sic] safe. I could not identify that any attempt had been made to construct escape routes. The slope of the ground was steep and there was too much in the surrounding area that posed a considerable hazard to [Mr Young]. I observed the tree which broke and fell on [Mr Young].*
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> *I have no doubt that it was the shock wave of the tree he fell [sic], that caused the rotten part of the tree to break and fall way. Having examined the area where the accident occurred I can say that, had [Mr Young] followed the safety requirements taught to him on the course he attended, he may have avoided the tree falling on him. The procedures are clearly outlined in the teaching criteria. If a risk analysis had been conducted it would have alerted [Mr Young] to a number of hazards in his immediate area and a number of precautions he should have taken before cutting down the tree. Had these precautions been taken as taught to him he would never have been in a position where the rotten tree could have fallen on him making the accident completely avoidable."*

I accept Mr Eastley's evidence about these issues. I am satisfied that he is qualified to express the expert opinion evidence that he has. I am satisfied that Mr Eastely had made clear to Mr Young when he left the TasTAFE course in March 2015, that under no circumstances should he attempt to fall trees without supervision and instruction from a qualified tree feller.

I note also the evidence of Mr Damian Hingston, the Regional Training Officer for the State Emergency Service, North West area. Mr Hingston said that an examination of the SES records relating to Mr Young indicated that he had participated in and competently passed a training module "Trim and cut felled trees" in November 2014. Mr Hingston said that Mr Young was not provided any training by SES for tree felling and that SES in Tasmania provides no training at all in regard to the felling of standing trees.

Comments and Recommendations

Section 28 (2) of the *Coroners Act* 1995 provides that a "coroner must, whenever appropriate, make recommendations with respect to ways of preventing further deaths and on any other matter that the coroner considers appropriate".

The power to make recommendations pursuant to this provision is not one to be exercised at large but rather by reference to matters associated with, relating to or connected with the death the subject of inquiry. Nathan J said in *Harmsworth v The State Coroner* [1989] VR 989 at 996:

> *"the power to comment, arises as a consequence of the obligation to make findings… It is not free ranging. It must be comment "on any matter connected with the death". The powers to comment and also to make recommendations…. are inextricably connected with, but not independent of the power to enquire into a death or fire for the purposes of making findings. They are not separate or distinct sources of power enabling a coroner to enquire for the sole or dominant reason of making comment or*

recommendation. It arises as a consequence of the exercise of a coroner's prime function, that is to make findings."

It is important also to recognise that the power reposed in a coroner by section 28 (2) is to be exercised primarily to attempt to prevent further deaths.

Given the circumstances of the death of Mr Young is similar to the circumstances of the deaths of Mr Dransfield, Mr Howard, Mr Hyland, Mr Mitchell and Mr Spanney, I consider it useful to address the issues arising from all of the deaths at the same time.

Clearly, if safely used, a chainsaw is a very useful tool with a multiplicity of applications, especially in the rural sector. On the other hand if not used safely, a chainsaw, especially when felling trees, is inherently extremely dangerous.

Death as a result of the use of chainsaws and tree felling is prevalent in Australia and disproportionately so in Tasmania. Data kept by the National Coronial Information Service indicates that at least 99 deaths occurred in Australia between 2000 and 2016 as a result of chainsaw use and tree felling. Of those deaths 23, or roughly a quarter, occurred in Tasmania. Tasmania's population is just 2.15 % of the national population. It is also very apparent that deaths arising out of chainsaw use in general and tree felling in particular account for a considerable percentage of accidental deaths occurring in rural areas of Tasmania.

It is also quite apparent that there are a number of common factors which caused or contributed to the deaths of each of these men mentioned above. Those factors include (except for Mr Mitchell) a lack of any, or any formal, training. In the cases of Mr Mitchell, Mr Dransfield and Mr Hyland the absence of any, or any proper personal protective equipment (PPE); and in the cases of Mr Howard, Mr Young, Mr Dransfield and Mr Mitchell poor tree felling techniques; and in the cases of Mr Spanney very dangerous chainsaw use practices. In every case death was, tragically, entirely avoidable had proper precautions been taken, tree felling techniques adopted and/or PPE used and worn. Given these factors I have determined that it is appropriate to consider the issue of whether to make recommendations, and if so what recommendations, in relation to each of the 6 deaths collectively.

In my view the circumstances of each death calls for the making of recommendations to attempt to prevent similar deaths from occurring in future. Each death was completely avoidable. It is important to ensure, to the extent possible, that lessons are learned from each death the subject of investigation so as to prevent, also to the extent possible, people making the same basic and deadly mistakes in the future.

Two very useful starting points for a consideration of the best safety practices in relation to chainsaw use are Forest Safety Code and the applicable Australian Standards.

The Safety Standards Committee of the Tasmanian Forest Industries Training Board Inc. published in 2007 the Forest Safety Code (Tasmania) 2007. The Code deals with all aspects of safety and hazards in forestry operations. Especially relevant in the current context are parts 4 and 5 which deal with chainsaw operation and manual tree felling respectively. The code outlines safe methods of chainsaw operation and manual tree felling and references

Australian Standard 2727 – Safe Chainsaw Operations (AS 2727). The code outlines the importance of risk assessment, the basic equipment required, and mandates that 'all manual tree felling operations are to be carried out in accordance with AS 2727'. It depicts both the proper positioning of cuts (Figure 3) and appropriate, alternative and cleared escape paths (Figure 4).

The Code also provides (at 5.8) that de-limbing or cross cutting should not be carried out from the downhill side of the log if the log has the potential to roll. Great emphasis is placed on appropriate safety procedures. The code, although directed towards the forest industry, is directly relevant to non-industry use of chainsaws as well. It is easy to understand. It should be followed by non-professional chainsaw operators and tree fellers.

Section 4 of Australian Standard 2727 deals in much more detail with the safe operation of chainsaws. It recommends the use of helmets (see 4.4(c)). It deals with site evaluation, tree assessment and worksite preparation before tree felling is attempted (see 4.5.3.2, 4.5.3.3 and 4.5.3.4 respectively). Those parts of the standard provide an easily understood guide to safety which, if followed, would likely have avoided several of the deaths the subject of these enquiries.

Section 4.5.3.5 of AS 2727 deals with the process of actually felling trees. It is worth setting out in full.

> *"The felling operation - All trees should be felled using a scarf and back cut.*
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> *The basic requirements for tree felling are shown in Figure 4.10 and are described as follows:*
>
> *(a) Scarf - The principal function of the scarf is to direct the falling tree in the desired direction. The scarf should determine the direction of the fall. Cuts used to form the scarf should meet with no overcutting or undercutting and should be cleaned out. There are several types of scarf.*
>
> *(b) Back cut - The back cut releases the tree, allowing it to fall, and is made after the scarf has been cut. The back cut should be horizontal and placed above the bottom of the scarf, forming a step which is intended to prevent the tree from sliding back over the stump during the fall.*
>
> *(c) Holding wood - The holding wood acts as a hinge which controls the tree's fall. The holding wood should be intact across the stump to maintain the direction of fall."*

It is apparent that compliance with the basic safety requirements set out in the Code and the AS 2727 will prevent fatalities in the future and would have prevented most of the fatalities the subject of these investigations.

I also observe that a fundamental issue in each case (except possibly Mr Mitchell's death) was the absence of training. It is no answer to an absence of formal training to say that a person has been using a chainsaw for 'years' without incident. All that this means is that a person has practical experience; it in no way ensures correct techniques are used, because

those techniques must be properly learnt in the first place. Training and at least some basic level of competency assessment is, in my view, essential. Training and assessment is of limited value if skills and techniques are not reasonably regularly reviewed.

In addition, as part of the investigation into these deaths, comment and assistance was sought from the three bodies identified as likely having the most contribution in relation to chainsaw and tree felling safety; namely the Forest Industries Association of Tasmania, WorkSafe Tasmania and the Tasmanian Farmers and Graziers Association (TFGA). Only the TFGA responded to the invitation to make a submission. No response, or even acknowledgement of the invitation, was received, at all, from either the Forest Industries Association of Tasmania or WorkSafe Tasmania.

The TFGA acknowledged that deaths relating to the use of chainsaws occur all too frequently and are a matter of great concern to the association and its members. The association observed that it was notable that persons who had received training were significantly under-represented amongst those suffering fatal injuries from chainsaw uses. This is undoubtedly correct and serves to highlight the importance of training to assist to avoid preventable deaths in the future.

I turn to the making of formal recommendations. I acknowledge that for the recreational or non-business chainsaw user it is important that regulatory requirements are not unduly onerous. However presently there is no regulation, at all, of the non-work related chainsaw use, and particularly tree felling. This is in contrast to boat and firearm use. I note that currently it is possible to purchase a chainsaw from a retail outlet other than specialist dealers, a situation that is very similar to the pre-firearm regulation position with respect to weapons and ammunition. I also note that there is no age limit, at all, on the use of a chainsaw for any purpose, including tree felling. It is acknowledged that none of the men whose deaths have been investigated were children, but that is, in my view not to the point.

I make the following recommendations:

- I **recommend** that all chainsaw operators must undertake approved chainsaw training prior to purchasing or using a chainsaw.

- I **recommend** that all persons selling chainsaws must be accredited chainsaw operators.

- I **recommend** that all chainsaw operators must undergo regular practical reassessment ideally every three years.

- I **recommend** that all land owners and managers be required to ensure that people permitted to use chainsaws on their land be appropriately qualified.

- I **recommend** that no person under the age of 16 years be permitted to own or use a chainsaw in any circumstances.

I thank the TFGA for its helpful submission. I acknowledge the contribution of Mr Keith Eastley to this investigation.

I express my sincere thanks to Mr Rick Birch for the very great assistance he provided to the Coronial Division in relation to the investigation of Mr Young's death as well as the 5 other deaths referred to in these recommendations and comments.

I convey my sincere condolences to the family and loved ones of Mr Young.

Dated 11 August 2017 at Hobart in the State of Tasmania.

Simon Cooper
Coroner